- 1. (currently amended): A process for the preparation of luminescent polymeric fibres, whereincharacterised in that the fibres are treated with a composition comprising
- (a) one or more luminescent lanthanide chelates containing three or four organic anionic ligands having at least one UV absorbing group and
- (b) one or more solvents.
- 2. (currently amended): A process according to claim 1, wherein characterized in that component (a) is a compound of formula I

$$L_m-Ln^{3+}(Ch^-)_n$$
 (I),

wherein Ln represents a lanthanide,

L_m-Ln³⁺(Ch⁻)_n

Ch⁻ is a negatively charged ligand containing at least one UV absorbing double bond, n denotes 3 or 4, m denotes a number from 0 to 4, wherein

when in case-n is 3, m denotes a number from 0 to 4 and L is a neutral monodentate or polydentate nitrogen-, oxygen- or sulfur-containing ligand or, when in case-n is 4, m denotes 1 and L is a single-charged cation.

3. (currently amended): A process according to claim 1, wherein characterized in that component (a) is a compound of formula I, II, III or IV

(1)

$$L_{m} = L_{n}^{3+} \begin{bmatrix} R_{1} & R_{2} & R_{3} \\ 0 & 0 \end{bmatrix}_{n}$$
 (II),

$$L_{m} L_{n}^{3+} \begin{bmatrix} R_{1} & O^{-} \\ O & I \end{bmatrix}_{n}$$
 (III),

$$L_m-Ln^{3+}[R_1-O]_n \hspace{1cm} (IV),$$

wherein Ln represents a lanthanide,

n denotes 3 or 4, m denotes a number from 0 to 4, in which

when in case n is 3, m denotes a number from 0 to 4 and L is a neutral monodentate or polydentate nitrogen-, oxygen- or sulfur-containing ligand or, when in case n is 4, m denotes 1 and L is a single-charged cation,

Ch' is a negatively charged ligand containing at least one UV absorbing double bond,

R₂, is hydrogen or C₁-C₆alkyl, and

 R_1 and R_3 are each independently of the other hydrogen, C_1 - C_6 alkyl, CF_3 , C_5 - C_{24} aryl or C_4 - C_{24} heteroaryl.

- 4. (currently amended): A process according to claim-2 or 3, wherein characterized in that component (a) is a compound of formula I, II, III or IV wherein n denotes 3 and L is a nitrogen-containing ligand.
- 5. (currently amended): A process according to claim-2 or 3, wherein-characterized in that component (a) is a compound of formula I, II, III or IV wherein L is a compound of formulae V to XII

$$R_4$$
 (V), R_4 (VII), R_4 (VIII), R_7 (VIII), R_7 (VIII), R_7 (VIII), R_8 (XII), R_8 (XIII), R_8 (XIII), R_8

or a cation of the formula H-N⁺(R₇)₃,

wherein R_4 , R_5 and R_6 are each independently of the other hydrogen, halogen, C_1 - C_6 alkyl, C_5 - C_2 4aryl, C_6 - C_2 4aralkyl, C_1 - C_6 alkoxy, amino, dialkylamino or a cyclic amino group and R_7 is hydrogen, C_1 - C_6 alkyl, C_5 - C_2 4aryl, C_6 - C_2 4aralkyl or vinyl.

6. (currently amended): A process according to claim 5, wherein characterized in that component (a) is a compound of formula II wherein L is a compound of formula V, VI, VII, VIII, IX, X, XI or XII

wherein R_4 , R_5 and R_6 are hydrogen, methyl, amino, pyrrolidino or dimethylamino or L is a cation of the formula $H-N^+(R_7)_3$, wherein R_7 is C_1-C_6 alkyl.

- 7. (currently amended): A process according to claim 2 or 3, wherein characterized in that component (a) is a compound of formula I, II, III or IV wherein Ln is Eu, Tb, Dy, Sm or Nd.
- 8. (currently amended): A process according to claim 3, wherein characterized in that component (a) is a compound of formula II or III wherein R₁ and R₃ are methyl, t-butyl, n-pentyl or phenyl.
- 9. (currently amended): A process according to claim 3, wherein characterized in that component (a) is a compound of formula II wherein R₂ is hydrogen.
- 10. (currently amended): A process according to claim 3, wherein-characterized in that component (a) is a compound of formula XIII to LII

$$\sum_{N}^{N} Eu^{3+} \left(\sum_{N}^{-1} A_{N}^{-1} A_{N}^{-1}$$

$$Eu^{3+}$$
 O^{-} $O^$

$$(H_5C_2)_2NH \quad Eu^{3+} \qquad (XXI)_1$$

$$(\mathsf{H_5C_2})_2\mathsf{NH} \quad \mathsf{Tb}^{3+} \quad \left((\mathsf{H_3C})_3\mathsf{C} \underbrace{\hspace{1cm} \mathsf{C}(\mathsf{CH_3})_3}_{\mathsf{O}}\right) \qquad (XXII),$$

$$\mathsf{Tb}^{3^{+}} \quad \left((\mathsf{H}_{3}\mathsf{C})_{3}\mathsf{C} \underbrace{\hspace{1cm} \mathsf{C}(\mathsf{CH}_{3})_{3}}_{\mathsf{O}} \right)_{3} \qquad (\mathsf{XXIII}), \quad \mathsf{Tb}^{3^{+}} \quad \left(\begin{array}{c} \mathsf{H}_{3}\mathsf{C} \\ \mathsf{O} \\ \mathsf{O} \end{array} \right)_{\mathsf{O}} \quad \mathsf{CH}_{\mathsf{O}} \right)_{\mathsf{O}} \quad (\mathsf{XXIV}),$$

$$Sm^{3+}$$
 $\left(H_3C \longrightarrow CH_3\right)_3$ (XXV), Sm^{3+} $\left(\begin{array}{c} \\ \\ \\ \\ \end{array}\right)_3$ (XXVI),

$$\mathsf{Sm}^{3+} \quad \left((\mathsf{H}_3\mathsf{C})_3\mathsf{C} \underbrace{\hspace{1cm} \mathsf{C}(\mathsf{CH}_3)_3}_{\mathsf{O}} \right)_3 \qquad (\mathsf{XXVII}), \quad \mathsf{Sm}^{3+} \quad \left(\underbrace{\hspace{1cm} \mathsf{CH}_3}_{\mathsf{O}} \right)_3 \qquad (\mathsf{XXVIII}), \quad \mathsf{Sm}^{3+} \quad \left(\underbrace{\hspace{1cm} \mathsf{CH}_3}_{\mathsf{O}} \right)_3 \qquad (\mathsf{XXVIII}), \quad \mathsf{Sm}^{3+} \quad \left(\underbrace{\hspace{1cm} \mathsf{CH}_3}_{\mathsf{O}} \right)_3 \qquad (\mathsf{XXVIII}), \quad \mathsf{Sm}^{3+} \quad \left(\underbrace{\hspace{1cm} \mathsf{CH}_3}_{\mathsf{O}} \right)_3 \qquad (\mathsf{XXVIII}), \quad \mathsf{CH}_3 \qquad \mathsf{C$$

$$Sm^{3+}$$
 $\left(\begin{array}{c} \\ \\ \\ \\ \\ \\ \end{array} \right)_3$ $(XXIX)$, Sm^{3+} $\left(\begin{array}{c} \\ \\ \\ \\ \\ \end{array} \right)_{0}$ CF_3 $\left(\begin{array}{c} \\ \\ \\ \\ \end{array} \right)_3$ (XXX) ,

$$Tb^{3+}$$
 $\left(\begin{array}{c} \\ \\ \\ \\ \\ \end{array}\right)_3$ $\left(\begin{array}{c} \\ \\ \\ \\ \end{array}\right)_3$

$$\mathsf{Nd}^{\mathsf{3+}} \quad \left(\bigcap_{\mathsf{Nd}^{\mathsf{3+}}} \mathsf{CF}_{\mathsf{3}} \right)_{\mathsf{3}} \qquad \mathsf{(LI)}, \qquad \quad \underline{\mathsf{or}} \qquad \quad \mathsf{Nd}^{\mathsf{3+}} \quad \left(\bigcap_{\mathsf{Nd}^{\mathsf{3+}}} \mathsf{CF}_{\mathsf{3}} \right)_{\mathsf{3}} \qquad \mathsf{(LII)}, \quad \underline{\mathsf{cr}} \qquad \quad \mathsf{Nd}^{\mathsf{3+}} \quad \left(\bigcap_{\mathsf{Nd}^{\mathsf{3+}}} \mathsf{CF}_{\mathsf{3}} \right)_{\mathsf{3}} \qquad \mathsf{(LII)}, \quad \underline{\mathsf{cr}} \qquad \quad \mathsf{Nd}^{\mathsf{3+}} \quad \left(\bigcap_{\mathsf{Nd}^{\mathsf{3+}}} \mathsf{CF}_{\mathsf{3}} \right)_{\mathsf{3}} \qquad \mathsf{(LII)}, \quad \underline{\mathsf{cr}} \qquad \quad \mathsf{Nd}^{\mathsf{3+}} \quad \left(\bigcap_{\mathsf{Nd}^{\mathsf{3+}}} \mathsf{CF}_{\mathsf{3}} \right)_{\mathsf{3}} \qquad \mathsf{(LII)}, \quad \underline{\mathsf{cr}} \qquad \mathsf{Nd}^{\mathsf{3+}} \quad \left(\bigcap_{\mathsf{Nd}^{\mathsf{3+}}} \mathsf{CF}_{\mathsf{3}} \right)_{\mathsf{3}} \qquad \mathsf{(LII)}, \quad \underline{\mathsf{cr}} \qquad \mathsf{Nd}^{\mathsf{3+}} \quad \left(\bigcap_{\mathsf{Nd}^{\mathsf{3+}}} \mathsf{CF}_{\mathsf{3}} \right)_{\mathsf{3}} \qquad \mathsf{(LII)}, \quad \underline{\mathsf{cr}} \qquad \mathsf{Nd}^{\mathsf{3+}} \quad \left(\bigcap_{\mathsf{Nd}^{\mathsf{3+}}} \mathsf{CF}_{\mathsf{3}} \right)_{\mathsf{3}} \qquad \mathsf{(LII)}, \quad \underline{\mathsf{cr}} \qquad \mathsf{Nd}^{\mathsf{3+}} \quad \mathsf{(LII)}, \quad \underline{\mathsf{cr}} \qquad \mathsf{Nd}^{\mathsf{3+}} \qquad \mathsf{(LII)}, \quad \underline{\mathsf{cr}} \qquad \mathsf{Nd}^{\mathsf{3+}} \qquad \mathsf{(LII)}, \quad \underline{\mathsf{cr}} \qquad \mathsf{(LII)}, \quad \underline{\mathsf{cr}$$

- 11. (currently amended): A process according to claim 1, wherein or 2 characterized in that component (b) is water, one or more water-miscible organic solvents or a mixture of water and one or more water-miscible organic solvents.
- 12. (currently amended): A process according to claim 11, wherein-characterized in that the water-miscible organic solvent is an aliphatic alcohol, etheralcohol, glycol, aliphatic ketone, carboxylic acid ester, carboxylic acid amide, aliphatic nitrile, aliphatic polyether or aliphatic sulfoxide.
- 13. (currently amended): A process according to claim 11, wherein characterized in that the water-miscible organic solvent is selected from the group consisting of ethanol, 2-butoxyethanol, ethylene glycol, propylene glycol, acetone, 2-butanone, ethyl acetate, tetrahydrofurane (THF), dimethylformamide (DMF), dimethylacetamide (DMA), N-methylpyrrolidone (NMP), acetonitrile, polyethyleneglycol dimethyl_ether and dimethylsulfoxide (DMSO).
- 14. (currently amended): A process according to claim 1, wherein characterized in that the composition formulation contains 0.01 to 20.0 % by weight of component (a) and 80.0 to 99.99 % by weight of component (b), based on the total amount of components (a) + (b).
- 15. (currently amended): A process according to claim 1, wherein characterized in that the composition formulation contains additionally(c) one or more colorants.
- 16. (currently amended): A process for the preparation of luminescent plastics, wherein characterized in that the plastics material is extruded in the presence of 0.01 10.0 % by weight, based on the amount of polymeric material, of a compound of formula II or III according to claim 3.
- 17. (original): A luminescent textile fibre prepared by the process according to claim 1.
- 18. (original): A luminescent plastic prepared by the process according to claim 16.

- 19. (original): A process according to claim 1 wherein the polymeric fibres are paper fibres or synthetic fibres.
- 20. (currently amended): The use of the process according to claim 1-A method for the preparation of anti-counterfeit documents, cards, cheques or banknotes which comprises incorporating therein a luminescent polymeric fibre prepared by the process according to claim 1.